



SPACE  
FOR BUSINESS  
BUSINESS  
FOR SPACE



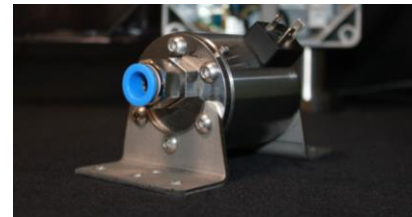
## TECHNOLOGY DESCRIPTION

The working principle of the valve is simple: a magnetic field is applied to the metallic sphere in the interior of the valve by means of a coil. The sphere then leaves its rest position at the valve seat and creates the necessary space for the pressurised fluid to pass through. In the absence of the magnetic field, the dynamic pressure of the flow pushes the sphere back to the valve seat and closes the valve. Given the possibility of modulating the magnetic field, high-switching speeds and frequencies are enabled.



## INNOVATIVE ASPECTS

- Simple design
- Fast and accurate micro-dosing of liquid and gaseous media (up to 3,000 Hz switching frequency)
- Higher durability (no fatigue e.g. due to mechanical springs)
- Corrosion-resistant ceramic valve body
- No lubrication required
- No pneumatic control required
- Low wear, as only one moving component
- Pressure differences between 0,5 and 1,000 bar



## TECHNOLOGY READINESS (in space application)

TRL 6-9 (2024)

COUNTRY OF ORIGIN

LATEST UPDATE

<b>TAGS</b>	#valve	#magnetic	#accurate	#fast	#durable	#micro-dosing
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## APPLICATION AREAS

Health	Energy	Mechanical Engineering	Food & Agriculture	Chemical Engineering & Biotechnology	Space technologies	Transport & Logistics
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# TECH CARD

